ROSSLYN RAMP BRIDGE
George Washington Memorial Parkway, near Key Bridge
Arlington Vicinity
Arlington County
Virginia

HAER No. VA-81

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
National Park Service
Department of the Interior
P.O. Box 37127
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I. INTRODUCTION

Location: George Washington Memorial Parkway milepost 0.25, 8.4 miles from Interstate 495; carries westbound GWMP over eastbound GWMP near Key Bridge in Arlington County.

FHwA Structure No.: 3300-012P.

Date of Construction: 1957-1959.

Type: Steel plate girder bridge.

Designer: Bureau of Public Roads with approval from the National Park Service (NPS).
Plans-- Main Bridge Office, Washington D.C.
Construction-- Region 15, Bureau of Public Roads.
T.D. Harris, District Bridge Engineer for construction.
William D. Haussmann, NPS Architect.

Contractor: Humphreys and Harding Inc., Washington D.C.

Present Owner: National Capital Region, National Park Service.

Present Use: Egress for outbound traffic from D.C. crossing Key Bridge to westbound GWMP. Bridge is an overpass carrying westbound traffic over eastbound lanes of GWMP.

Significance: Built to improve access to the norther segment of the GWMP.

Project Information: Documentation of the George Washington Memorial Parkway and Clara Barton Parkway was undertaken as a multi-year project by the Historic American Buildings Survey and the Historic American Engineering Record (HABS/HAER), a combined division of the National Park Service, Robert Kapsch, Chief. The project was sponsored by the Park Roads Program of the National Park Service, John Gingles, Deputy Chief, Engineering and Safety Services Division. The Project Supervisor was Sara Amy Leach, HABS Historian. Bridge reports were prepared by Elizabeth M. Nolin (1988); Michael P. Kucher (University of Delaware, 1993); and Jennifer P. Wentzien (University of Washington, 1994).

HABS Report No. VA-69 prepared by Timothy Davis (University of Texas) provides an overview history of the entire parkway project. Jack E. Boucher and Jet Lowe produced the large-format photographs. The Washington-based summer 1994 documentation team was headed by landscape architect Tim Mackey (Harvard University, Graduate School of Design).

II. HISTORY

Rosslyn Ramp Bridge, also known as the Bridge over Road "B", was constructed during the extension of the George Washington Memorial Parkway (GWMP) from Spout Run to Langley, VA. The bridge is located on an earlier segment of the parkway stretching from the Memorial Bridge to Spout Run. The bridge was added in response to inadequate access to the northbound GWMP from Key Bridge and Rosslyn Circle.[1] The bridge destroyed a view from Key Bridge which was a common textbook example of parkway design.[2]

The bridge was designed by the Main Bridge Office of the Bureau of Public Roads in 1956 and approved by the National Park Service. While the architectural design can be characterized as predominently functional, the stone masonry guard wall of the approaches was intended to conform to other stone work along the parkway and belongs to the rustic style popular in parks and parkways in the United States.[3] As with other GWMP bridges, a mica schist from a nearby quarry was specified.

Description

Rosslyn Ramp Bridge is a multi-beam steel plate girder bridge with a single span of 122' resting on abutments. The abutments are skewed 65 degrees to the roadway. The reinforced concrete deck is 30' wide. The bridge originally provided a one-way 20' roadway with two 2' curb strips and two 3' sidewalks.

The foundations are comprised of counterfort type (stepped) spread footings over piles. Treated timber piles from Suffolk, VA are 30' to 40' long. Reinforced concrete abutments and wing walls rest on the footings. Exposed concrete surfaces reveal the horizontal tongue and groove form board lines. Concrete was supplied by Maloney Concrete, Georgetown Plant. Steel plate girders meet ASTM A-373 specifications for welding and are anchored to the abutments with steel girder shoes. Structural steel was fabricated and furnished by Richmond Steel Co. Stone masonry guard walls for the approaches are by the Piquado Stone Co. with stone from nearby Stoneyhurst Quarries. The stock aluminum handrail was supplied by the Atlas Machine and Iron Works, Arlington, VA. The total cost of the project was $363,000 of which the Virginia Department of Highways payed half.[4]

Alterations

Repair work completed in 1982-1983 involved the replacement of the bridge deck. The original handrails were reset. Standard Specification F.P.-79 were used. Sidewalks have been eliminated.

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[1]"Final Construction Report, Project 1A5", 1959.

[2]See Christopher Tunnard, Man-made America: Chaos or Control?, 1963 and Lawrence Halprin, Freeways, New York, 1966.

[3]"Final Construction Report, Project 1A35," 1959.

[4]"Final Construction Report, Project 1A5," 1959.

III. SOURCES

Halprin, Lawrence. Freeways. New York. 1966.

Tunnard, Christopher. Man-made America: Chaos or Control? Yale University Press. 1963.

U.S. Department of Commerce, Bureau of Public Roads. Plans for Proposed Project 1A5 ("Bridge over Road 'B' Near Key Bridge"), 1A35, and 1A53 (redecking in 1984). Microfiche reductions of original construction drawings on file at National Capital Region Park Headquarters, National Park Service, Washington D.C.

U.S. Department of Commerce, Bureau of Public Roads, Division of Eastern National Forests and Parks, "Final Construction Report, George Washington Memorial Parkway, Project 1A5." 1959. On deposit at the remote storage facility of the FHwA office in Sterling, Virginia. See also report on alterations, Project 1A35.

U.S. Department of the Interior, Historic American Buildings Survey (HABS), No. VA-69, "George Washington Memorial Parkway," 1994. Prints and Photographs Division, Library of Congress, Washington D.C.